19990529.ba v02_n563.bam.990529

>From ???@??? Sun May 30 07:52:05 1999
Message-Id: <199905291830.d4SNgj023635@sco.theporch.com>
Date: Sat, 29 May 1999 13:30:07 CDT
From: Old Tube Radios <boatanchors@theporch.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: BOATANCHORS digest 2563

BOATANCHORS Digest 2563

Topics covered in this issue include:

1) Synchronous detectors defined
   by "Arden Allen" <gumbear@pacbell.net>
2) Re: HV wiring for NCX-3/M
   by "Arden Allen" <gumbear@pacbell.net>
3) Military Radio Reflector?
   by Dick Dillman <ddillman@igc.apc.org>
4) Re: Military Radio Reflector?
   by Jerry Proc <jproc@idirect.com>
5) Re: AM DETECTORS CONTINUED
   by "Arden Allen" <gumbear@pacbell.net>
6) How To Become Radio Amateur
   by "Don Ehrlich" <ehrlich@olypen.com>
7) Re: AM DETECTORS CONTINUED
   by Michael Tallent <mtallent@concentric.net>
8) Transmitting DSB
   by "Barry L. Ornitz" <ornitz@tricon.net>
9) FMLA: The Forgotten
   by mnhopkins@juno.com
10) Command Set Beads
   by David Stinson <arc5@ix.netcom.com>
11) Book Recommendation?
   by "Arden Allen" <gumbear@pacbell.net>
12) bc1000 psu
   by BEN NOCK <G4BXD@compuserve.com>
13) Re: Military Radio Reflector?
   by Dick Dillman <ddillman@igc.apc.org>
14) Shipboard BA cable installations
   by Ray Mote <rmote@rain.org>

Message-Id: <199905290215.TAA11278@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Synchronous detectors defined
Date: Fri, 28 May 1999 19:13:33 -0700

MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Phase coherent Anchorites;

In the "Non PLL syncronous detector" thread there was, I claim, an ambiguity as to what *synchronous detection* is. It seemed to me that it meant nothing more complicated than phase locking a BFO to the carrier of an AM signal. In a private e-mail I was encouraged to do a little study on the subject so I hauled my bones over to my dusty bookshelf and after flipping pages for a while found what I was looking for. Yes, it is as simple as I suggested according to the following quotation:

"4. If selective fading attenuates the carrier with respect to the sidebands, the type of distortion shown in Fig. 24.181 will occur [Fig 24.181 is a graph of a 100% modulated AM signal presented to a detector with the carrier substantially attenuated with the resultant envelope reversal about the zero axis, the reversed portion being in phase opposition to the original carrier]. The shortcomings can be subdued by increasing the carrier. This can be done by adding an additional carrier to the received signal; detection is then said to be synchronous." _ para. 24.5c, from A. G. W. Uitjens and H. E. Kater, authors of Section 24 of Electronic Designers Handbook, Second Edition by L. J. Giacoletto; McGraw-Hill, copyright 1977; ISBN 0-07-023149-4.

I may be accused of splitting hairs and my purpose is NOT to demean the contributions of others but to say that synchronous detection, IMHO, can be had with a simple diode envelope detector and sufficient level BFO injection (7-10 X signal) to suppress distortion products and by devising a means of locking the BFO to the varying carrier. I have developed a simple and demonstrably efficient, low distortion *heterodyne* detector in my subterranean BA laboratory simply by following the recommendations in one of my '50's era ARRL Handbooks. By following a suggestion from a List member I can add locking capability to the BFO and then I will have true, non critical synchronous detection. No rocket science, just a practical means of achieving distortion free AM reception without tearing the guts out of my favorite collectable or creating an external solid state monstrosity. Simple is good. Have fun.

Arden Allen   KB6NAX   Vallejo, CA   gumbear@pacbell.net

Message-Id: <199905290215.TAA11284@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>

To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: HV wiring for NCX-3/M
Date: Fri, 28 May 1999 19:16:14 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi Buzz;

> But, I'm in a quandry on what "type" of wire to use for the HV leads?
> Normal stuff of course, is only UL to 600V. ....

As a general rule, PVC insulation is good for 600 volts/mil dielectric withstand voltage. That would translate to 6000 volts for a piece of hookup wire with a skimpy .010 inch insulation. The problem with that is wire is not perfect and its insulating attributes are easily compromised by use. Misuse can lead to catastrophe. Misuse is what connecting cables are often subjected to. The criteria for fabricating a safe cable is to use construction that protects the wire and its insulation to the extent possible from the insults of misuse. Heavier insulation, selecting wire with proper stranding for flexibility, terminating wires so they have reliable connectivity, supporting wires at flexure points by sheathing, use of strain reliefs and cable clamps at connectors, etc. Assuming you are looking for a wire that has good resistance to misuse and will also be used to construct a durable cable assembly, I recommend UL style 1007 wire for voltages under 42 VDC (30 VAC) and UL style 1015 wire for voltages up to around 600 volts. For voltages above approximately 600 volts use 5000 volt PVC test lead wire such as Belden 9899. Construct the cable with a gentle helical twist of the wires to avoid cross-overs and cover with a snug fitting PVC 105 sleeving. Reinforce the wire bundle at the connector clamps with black PVC tape and apply the clamps over the PVC sleeving. Such a cable construction will resist just about all abuse next to being run over by a train. The UL style wires and sleeving are available through Newark Electronics or most any commercial distributor.

When it comes to high voltage safety, I use the belt and suspenders approach. I add a durable bonding wire between the chassis of each unit. The bonding wire is attached by an independent grounding stud on each unit.

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Date: Fri, 28 May 1999 19:36:29 -0700 (PDT)
Message-Id: <2.2.16.19990528192320.3e0fb236@pop.igc.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"
To: Old Tube Radios <boatanchors@theporch.com>
From: Dick Dillman <ddillman@igc.apc.org>

Subject: Military Radio Reflector?

I've heard tell that there's an email reflector for military radio enthusiasts but I've been unable to find the details. Can anyone supply information about this alleged reflector?

Regards,

Dick

Dick Dillman, W6AWO
Chief Operator at K6KPH of the Maritime Radio Historical Society
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Message-ID: <374F58FC.B826CF60@idirect.com>
Date: Fri, 28 May 1999 23:03:25 -0400
From: Jerry Proc <jproc@idirect.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
CC: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: Military Radio Reflector?
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Hi Dick,

I belong to the MILITARY RADIO COLLECTOR GROUP. It's not a mail reflector but more like an E-mail net exclusively devoted to military radios (and one good humour section with each posting). To join the distribution list, send E-mail to:
Dennis R Starks <military-radio-guy@juno.com>

Dick Dillman wrote:

> I've heard tell that there's an email reflector for military radio
> enthusiasts but I've been unable to find the details. Can anyone supply
> information about this alleged reflector?
>
> Regards,
>
> Dick
>
> Dick Dillman, W6AWO

> Chief Operator at K6KPH of the Maritime Radio Historical Society
> Collector Of Heavy Metal:
> Harleys, Willys and Radios Over 100lbs.

--

Regards,
Jerry Proc VE3FAB   jproc@idirect.com
Web: www3.sympatico.ca/hrc/haida
HMCS HAIDA Historic Naval Ship, Toronto Ontario

Message-Id: <199905290337.UAA25126@mail-gw6.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AM DETECTORS CONTINUED
Date: Fri, 28 May 1999 20:38:22 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

Hi John and detectionists;

> > >> Finally DSB requires a very low complexity transmitter.......
> > >
> > >But difficult to operate.
> >
> > Ridiculous! Look at all the appliance operators who can operate a SSB rig. If you mean doing internal adjustments, DSB is much simpler than SSB and is comparable to AM in its simplicity.
>
> I agree. All that's needes is a balanced modulator, no filtering needed.

Anything is simple on paper. The only thing that can go wrong is your pencil lead may break.

I seem to remember that it takes about 30 DB of carrier suppression to make heterodynes practically inaudible. I think the FCC wants us to have 50 DB (correct me if I am wrong). It has been asserted that an AM rig could be easily modified for DSB. OK, we would need a rig with a pair of finals. We would kludge up the pair to have push-pull grid drive and a parallel plate circuit so the usual pi network would not need to be modified. Add some kind of front panel balancing control and a switch to change from parallel to push-pull drive. Simple, right? How do you dip (resonate) and load the final? By switching the pair to parallel drive and tuning for dip or max out, advancing the loading until full power plate current is achieved and and then switching back to push-pull drive and balancing for minimum carrier. And suppose you want to change bands? Gotta do it again.

QSY to a differnent band segment? Do it again. Can you maintain better than 30 DB carrier suppression from 160-10 meters? While the finals are heating and cooling from QSO to QSO, does balance need to be continually readjusted? How do you know if you are achieving 30 DB suppression each time you balance the finals? Use a wattmeter with a switchable low power scale? Guaranteed by design? Is it a job for an appliance operator?

OK, I have my head in a shady spot. Anybody got some good experience with a DSB modified rig? How did you operate it and how would you rate its difficulty of operation?

Arden Allen KB6NAX Vallejo, CA gumbear@pacbell.net

Message-ID: <006b01bea987$46ebf320$18f9cdd0@ehrlich>
From: "Don Ehrlich" <ehrlich@olypen.com>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: How To Become Radio Amateur
Date: Fri, 28 May 1999 20:55:36 -0700
MIME-Version: 1.0
Content-Type: text/plain;
charset="iso-8859-1"
Content-Transfer-Encoding: 7bit

While browsing a local antique shop I found a very nice copy of the seventeenth edition of How To Become A Radio Amateur published in 1958. This one has a two tube regen using a pair of 6AQ5's. The beginners transmitter is a 6DQ6 oscillator. I enjoyed reading it but do not have any special interest in keeping it. I expect that this little book may be special to someone on the list and so I offer it for what I paid for it plus a couple bucks mailing .... eight dollars total. It is in very nice condition with a few tiny creases on the front and back covers but otherwise looking like new.

Don Ehrlich
K7FJ
Joyce, WA

Message-ID: <374F6AAD.CA917CDE@concentric.net>
Date: Sat, 29 May 1999 00:18:53 -0400
From: Michael Tallent <mtallent@concentric.net>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Re: AM DETECTORS CONTINUED
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Arden Allen wrote:

>
> Hi John and detectionists;
>
> > > >> Finally DSB requires a very low complexity transmitter.......

good stuff snipped

> OK, I have my head in a shady spot. Anybody got some good experience with
> a DSB modified rig? How did you operate it and how would you rate its
> difficulty of operation?
>
> Arden Allen   KB6NAX   Vallejo, CA   gumbear@pacbell.net

In 1962 while attending college (EE) my transmitter was an Elmac AF-67 driving two 4-400's plate modulated by 2 4-250's. The 500 ohm audio output of the AF-67 drove the modulator. Not having any money, I wanted to join the SSB fad. The transmitter was a home-brew rig I bought and it originally was run in push-pull with a National multi-band grid circuit and big plug-in coils in the plate of the 4-400's. I changed the grid to parallel and put in a pie network on the parallel 4-400 plates.

While reading all this EE stuff, it occurred to me that it would be easy to convert the 4-400's to a balanced modulator and run DSB. This would get rid of the high level modulator and the carrier (most). I wired the grids back into push-pull. Removed the neutralizing capacitor from the final. Used the 500 ohm audio from the AF-67 to drive the primary of a TV power transformer. Used the center tapped HV secondary to drive the screen grids of the 4-400's for modulation (I said cheap). I did not have any balancing adjustments, and I only had the 2 4-400's so any matching was impossible.

The rig performed fine, hams within 5-10 miles could hear some carrier but further away I did not get any reports of carrier. Now it has been a few years, and I don't remember HOW I tuned up this rig, but it must have not been very difficult or I would probably remember the procedure. After about a year I got a CE 20A and things got more normal. I do remember getting some reports of "pretty good" unwanted sideband suppression :-).

Mike Tallent W6MXV

I have greatly enjoyed the discourse on modulation schemes

Message-Id: <199905290450.AAA02917@flash.naxs.net>
From: "Barry L. Ornitz" <ornitz@tricon.net>

To: Old Tube Radios <boatanchors@theporch.com>
Cc: "Arden Allen" <gumbear@pacbell.net>
Subject: Transmitting DSB
Date: Sat, 29 May 1999 01:49:31 -0400

Arden wrote:

>Anything is simple on paper. The only thing that can go wrong
>is your pencil lead may break.

>I seem to remember that it takes about 30 DB of carrier
>suppression to make heterodynes practically inaudible. I think
>the FCC wants us to have 50 DB (correct me if I am wrong).

There is no requirement for carrier suppression levels in the amateur service. In the HF bands, your signal must occupy no more spectrum than a communications quality AM signal. [Parts 97.305 and 97.307] And 30 dB of carrier suppression is not difficult to achieve in a simple fashion.

>It has been asserted that an AM rig could be easily modified for
>DSB. OK, we would need a rig with a pair of finals. We would
>kludge up the pair to have push-pull grid drive and a parallel
>plate circuit so the usual pi network would not need to be
>modified. Add some kind of front panel balancing control and a
>switch to change from parallel to push-pull drive. Simple,
>right?

Right, but you would not need this switch. [Note that for the discussion below, I am referring to the easiest way to generate DSB at high level - by screen modulating the pair of tubes Arden described.]

>How do you dip (resonate) and load the final? By switching the
>pair to parallel drive and tuning for dip or max out, advancing
>the loading until full power plate current is achieved and
>then switching back to push-pull drive and balancing for
>minimum carrier.

How do you tune up a SSB transmitter? With no audio, there is no RF. You do it by supplying an audio signal and then tuning the final as it were a CW output.

There is no need to switch between parallel and push-pull drive. If you supply a tone when tuning, you dip and peak in exactly the same way as SSB. This, of course, puts out a tone modulated carrier. Compare it to the two-tone carrier the Drake Twins transmit on tune.

An alternate method is to use DC as the modulating voltage with a switch to turn it off when not in tube position. The DSB high-level modulator only uses one tube for a given polarity of the modulating waveform. What happens is that one tube handles the positive half of the modulation and the other tube handles the negative half. The push-pull input (with parallel output) or the parallel input (with push-pull output) merely changes the phase of the RF by 180 degrees on the zero crossings of the audio. With just one tube turned on with the DC, you tune as if the signal is CW (which it is).

>And suppose you want to change bands? Gotta do it again. QSY to
>a differnent band segment? Do it again. Can you maintain
>better than 30 DB carrier suppression from 160-10 meters? While
>the finals are heating and cooling from QSO to QSO, does balance
>need to be continually readjusted? How do you know if you are
>achieving 30 DB suppression each time you balance the finals?
>Use a wattmeter with a switchable low power scale? Guaranteed
>by design? Is it a job for an appliance operator?

Change bands, no problem. You have to retune a SSB or AM rig when changing bands too. QSY? Maybe, but again this is nothing new. It is no different than tuning an AM, CW, or SSB rig in that requirement.

Carrier suppression? This is mainly determined by how well matched the push-pull RF signals are balanced. You can compensate for some of this by adding some DC to the modulating voltage (which has the effect of moving the zero crossings up or down slightly). Preferably, you can add a capacitor to balance the RF. If you use trimmers here, as you would in a bandswitching arrangement, the adjustment would be done only at alignment, with the audio adjustment doing the minor touch-up. Adjustment takes a few seconds and typically holds over an entire band.

How to do the carrier balance? Turn off the tone, or remove the large DC voltage used when tuning (which is to approximate the level of the highest modulating voltage). Then turn the balance control for minimum output with no audio input. Since there is no actual number that must be achieved, this is entirely un-critical. How much output are you likely to see with the screens grounded (or both possibly biased to a small negative voltage)? Plate meter, SWR meter, field strength meter - any can be used to monitor nulling the output.

OK, I have known some appliance operators that possibly could not do it. Of course they also had to have rigs with broadband 50 ohm outputs and perfect 50 ohm antennas. And these guys cannot adjust the volume controls either (especially the microphone control). Some of the better ones can read the channel number (oops, the frequency - this is not the 2-meter CB band, is it?).

Anyone capable of tuning a CW or AM rig with drive, plate, and load controls can do it. Touching up the balance takes only a few seconds longer.

>OK, I have my head in a shady spot. Anybody got some good
>experience with a DSB modified rig? How did you operate it and
>how would you rate its difficulty of operation?

Actually yes. I had an ARC-4 with an 829 (dual beam power tube)final. I used to work AM phone with it, but when a friend got a SSB URC-40 rig through MARS, I converted my unit to DSB. I kept the push-pull drive but changed the output to parallel. Once initially balanced, it needed no more adjustments over the entire band (or the dozen or so crystals I had for it). I used a homebrew VHF converter ahead of my HF receiver since the ARC-4 was completely deaf, even with AM.

Of course, the 6L6 crystal oscillator drove the crystals mighty hard and the entire rig would drift about 10 kHz in the first two or three seconds of transmission. But this was not the fault of the modulator. To keep my friend from having to "chase me", I would wait about two seconds after keying the microphone before talking. My friend noted a rather weak (drifting) carrier during this time as the rig stabilized to the proper frequency. The waiting is not unlike very, very, very long differential keying. I never measured the carrier suppression very accurately. Most weak signal SSB stations never noticed it (and actually very few noticed the other sideband too).

73, Barry L. Ornitz   WA4VZQ   ornitz@tricon.net

To: Old Tube Radios <boatanchors@theporch.com>
Date: Sat, 29 May 1999 07:24:09 -0500
Subject: FMLA: The Forgotten
Message-ID: <19990529.072412.-3185349.0.MNHopkins@juno.com>
MIME-Version: 1.0
Content-Type: text/plain
Content-Transfer-Encoding: 7bit
From: mnhopkins@juno.com

I met Frank in 1936 when he got me on 5 Meters.

Of course that was this Frank's daddy, but when this one came to the door I knew, as they say in Indiana, "nothing got in under the fence."

I was just about out of radio. I can't lift much and the only family here is a granddaughter who is always pregnant or taking care of a little one, so I hated to ask her to move the RCA for me to work on it and, besides, her mom stole my soldering gun.

But the granddaughter bought a Ten-Tec PM thing at a garage sale for $3, thinking it "some kind of ham radio" and gave it to me saying "mom won't care about something that just uses batteries."

It would work, a little, on receive, but the transmitter was dead. There was a date, 1972 on one of the boards and I found a review of it in an old QST. Using a hide out soldering gun I got free from TechAmerica when I bought some flashlights for the kid's Christmas and a voltmeter with big numbers on the display to help my 1908 eyes, I got it working with a transistor from an old TV set. I don't remember if it was the one that did Red, Green or Blue.

The receiver was still a joke - wider than a BC-455, but in the early afternoon I could get on 40M with my 66 foot dipole and work a few stations. It was there I met Frank, or this Frank, who kept asking "QRO?" I explained why I couldn't and, since I was a local, he came over.

I almost fell down when I went to the door as he looked just like his daddy who I met in '36 in San Francisco when I had given up starving as a telegrapher and taking to making calls for Motorola. Frank had a company that had something to do with making the big bridge out there and he was trying to get a contract with Oakland for their police, as I was. GE got it, but Frank introduced me to 5 Meters and this Frank even knew a little about those days -- from talking with his daddy, I guess.

Frank changed a lot of things around here. He brought a pretty young woman with a mean looking skinny husband along with him. The woman ran my washing machine all day and washed all the curtains while the husband cut a door in the back for my cat, Mr. Borger, to go in and out during my naps and not have to mark the place up so bad.

They turned the AR-88 on its side, cleaned out a nest left by a rat Mr. Borger probably got, and had it running in no time. I asked him to look at the rig, too, but he said he was worried about my changing coils so close to the ground. Instead he took the chassis out of the old record player, used two of the 6L6 sockets to hold coils, and built an little amp in the bread box. It has a key lock that kills the B+ when I open it and he brought coils for all the bands that the Ten-Tec covers. We just use the Ten-Tec for a VFO now

The next Saturday he brought some kids, who he said were "like the Demolay" to scrape the house and put on a coat of primer so the city could take down the sign. They mowed the yard and got the last of Mr. Borger's smell out of the carpets, too, while Frank worked with the other two 6L6s.

They ended up upside down in a push-push doubler driven by a 12AX7 from the pre amp in a crystal cracker affair that hits 5M or 10 if I kill one heater. Frank retuned my RME 152 so it brings 5M out to 7mc and I don't have to squint to see the switch on the AR-88. But I can see a lot better since he had the skinny guy put up three drop lights at the operating desk. When I throw the power switch, they light up that whole end of the room.

So I can get on 40 fine now and work just about anything I hear. There is an old carbon mic for the 5 Meter rig, too, and the TV antenna is fine for that band.

There is a lot of activity up there again and I'm glad we got it back.

de ab5L, michael in dallas, MNHopkins@JUNO.com
Student of Tecraft, ICM and Six Meters' Golden age: 1957-58 Box
226841, Dallas, TX 75222 copyright FMLA XXXVIII

Message-ID: <374FFE92.D2B4169@ix.netcom.com>
Date: Sat, 29 May 1999 09:49:54 -0500
From: David Stinson <arc5@ix.netcom.com>
MIME-Version: 1.0
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Command Set Beads
Content-Type: text/plain; charset=us-ascii
Content-Transfer-Encoding: 7bit

Bill:
How many bags of bead will you trade me for
a clean TCZ external antenna cap-- you know, the three-bang job
like goes on the ART-13.

73 Dave AB5S

Message-Id: <199905291555.IAA21547@mail-gw3.pacbell.net>
From: "Arden Allen" <gumbear@pacbell.net>
To: Old Tube Radios <boatanchors@theporch.com>

Subject: Book Recommendation?
Date: Sat, 29 May 1999 08:56:16 -0700
MIME-Version: 1.0
Content-Type: text/plain; charset=ISO-8859-1
Content-Transfer-Encoding: 7bit

BA Bookworms;

Ran across this book on the web.....

Communications Receivers: Principles and Design
by Rohde, Ulrich L

......and I would like to know if anyone is familiar with it and would it be useful in learning practical theory for understanding latter day boatanchors. Thanks.

Arden Allen   KB6NAX   Vallejo, CA   gumbear@pacbell.net

Date: Sat, 29 May 1999 13:12:37 -0400
From: BEN NOCK <G4BXD@compuserve.com>
Subject: bc1000 psu
To: Old Tube Radios <boatanchors@theporch.com>
Message-ID: <199905291313_MC2-778B-B625@compuserve.com>
MIME-Version: 1.0
Content-Transfer-Encoding: quoted-printable
Content-Type: text/plain;
      charset=ISO-8859-1
Content-Disposition: inline

BC-1000 vehicle psu, 6/12/24v operation, =

replaces the battery box below the BC-1000 set. =

50.00 Pound strling.

plus postage if required. =

cheers, Ben G4BXD.

Date: Sat, 29 May 1999 10:50:56 -0700 (PDT)
Message-Id: <2.2.16.19990529103748.47672ee0@pop.igc.org>
Mime-Version: 1.0
Content-Type: text/plain; charset="us-ascii"

To: Old Tube Radios <boatanchors@theporch.com>
From: Dick Dillman <ddillman@igc.apc.org>
Subject: Re: Military Radio Reflector?
Cc: boatanchors@theporch.com

Greetings fellas and thanks for the reference to the military radio on-line magazine operated by Dennis Starks. I was actually on his distribution list for a while but had to drop it due to the volume of mail I receive.

What I was looking for was an actual email reflector much like the BA list but dealing with military radios. So far it seems this does not exist.

So I have a question for y'all and anyone else on the list who may care to comment: Do you think there's enough interest to support such a list?

It would be fairly easy to start one (via eGroups). I'd be willing to do the work necessary to set it up if the interest is there. Membership in the list would be free.

Regards,

Dick

Dick Dillman, W6AWO
Chief Operator at K6KPH of the Maritime Radio Historical Society
Collector Of Heavy Metal:
Harleys, Willys and Radios Over 100lbs.

Date: Sat, 29 May 1999 11:29:52 -0700 (PDT)
From: Ray Mote <rmote@rain.org>
To: Old Tube Radios <boatanchors@theporch.com>
Subject: Shipboard BA cable installations
Message-ID: <Pine.SUN.4.05.9905291046240.13584-100000@coyote.rain.org>
MIME-Version: 1.0
Content-Type: TEXT/PLAIN; charset=US-ASCII

While searching for a steel strapping tool, I ran across the item my Ship Alteration (SHIPALT) team preferred for shipboard cable installation. It's the Steelbinder ST-111; the "first cousin" ST-101 is available at J&L Industrial Supplies (800) 521-9520 as their item number JSS-01101E. (The '111' has shorter handles and a short shoe that make it ideal for banding cables in cramped overhead spaces and under deckplates.) Both should be available from full-service tool emporiums, but will probably have to be ordered (not stocked).

BA volunteers may have noticed the pipes, cables & "stuff" bundled together and running along corridors and across various compartments both overhead and under deckplates. The bundles are secured with stainless steel strapping and clips, usually with a rubber cushion between the steel strap and cable. Things like Nylon wire ties are outlawed due to the toxic smoke they produce in a fire, and even the cable jackets & insulation are required to be of the "low smoke" variety. Active ships have special cables that are not only low-smoke, but have a filler ("silly putty" on steroids) between the conductors to prevent water penetration along the cable. Most cabling also has an additional metal braid on the outside to serve as armor against chafing, etc., making gloves mandatory for handling the stuff.

Metal I.D. tags are attached everywhere a cable penetrates through a bulkhead (on both sides) and every so often along the cable for ease in identifying cables in a bundle when repairing battle damage. These tags should make it easier for BA volunteers to pursue restoration efforts when replacing power, control, audio, and RF cabling aboard ship.

Bulkheads and decks (floors and walls) are penetrated using stuffing tubes (metal pipes with rubber plugs and screw-on end caps having holes sized to fit the cable at each end). All of these specialty items are available at most commercial shipyards, if the restorer wants to preserve the "original" look and/or minimize risk to life in a fire.

Shipboard memorials have many of the same unique safety aspects of active ships. Replacing cabling is tedious work, but it's not *that* difficult if you know how to go about it and have the right tools for the job.

Well, that's a fast birds-eye view of how they did it. For more info, contact your nearest (real) sailor. They can tell you far more about these installations than this lowly "sand crab" can. :-)

73....Ray Mote, K5FKT <rmote@rain.org> Oxnard, CA

End of BOATANCHORS Digest 2563
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